CCTGGTCTCG CACTGCTCAC TCCCGCGCAG TGAGGTTGGC ACAGCCACCG CTCTGTGGCT CGCTTGGTTC CCTTAGTCCC GAGCGCTCGC CCACTGCAGA TTCCTTTCCC GTGCAGACAT GGCCTCTGGC ACCACCACTA CCGCCGTGAA 101 151 GGTGAGATGA GCCCTCCCAG CCGCAGCGGT TCGCCTGCCG GATGCCTTCN 201 CCTTCAAATG TTTGTTGATT TTTATGGAAG GCTTTGAAAT ATTTGTTGAT 251 301 TGATGTTCAG TAATTTTCAG ATTTCAAAAA AATAACTAGG GCTTGGCAGG AATGGAGAAG AGCATATGAA TAAATGAATT TGCTTAGAAT CTTATTTCTA ATAAAAATTA CCAAATACAA TAATCTTATA TGTCTTTTTC TGCTCTTAGA 401 451 TTGGAATAAT TGGTGGAACA GGCCTGGATG ATCCAGAAAT TTTAGAAGGA 501 AGAACTGAAA AATATGTGGA TACTCCATTT GGCAAGGTTA ATATCCAACT 551 601 TTCTCTAAGT TGTATCCTCA GACTCTTCAG ATTCCATGAG TCCTGTTGTG 651 GTTGAACAAT TATAATTTAC ATACCTGTTT TTTAAATCAC TGAGTTAAAT 701 GTCATTTTT TCATTGCATG CAGCCATCTG ATGCCTTAAT TTTGGGGAAG 751 ATAAAAATG TTGATTGCGT CCTCCTTGCA AGGTATGGTA NNNNNNNNN NININININI NINININININ NINININININ NININININININ NININININININ 801 AAGCTTGATA CTCATCACGG GTTAACAATT TCTTCTCTCC TTCCATAGGC 851 901 ATGGAAGGCA GCACACCATC ATGCCTTCAA AGGTCAACTA CCAGGCGAAC 951 ATCTGGGCTT TGAAGGAAGA GGGCTGTACA CATGTCATAG TGACCACAGC 1001 TTGTGGCTCC TTGAGGGAGG AGATTCAGCC CGGCGATATT GTCATTATTG 1051 ATCAGTTCAT TGACAGGTAA GCAGTCATAC AAAATGCTTT AGGCTATTGT 1101 AGCTGGTCAT TTTCAGCTCA AATGGACGAC NNNNNNNNN NNNNNNNNN 1201 GAGGTCGACG GTATCGATAA GCTTTGTAAA CAATTGTCTT TAGCTTATCC 1251 AGAGGAATTG AGTCTGGAGT AAAGACCCAA ATATTGACCT AGATAAAGTT 1301 GACTCACCAG CCCTCGGAGG ATGGAAAGAT GGCCTTAAAA TAAAACAAAC 1351 AAAAACCTTT TTTGCTTTAT TTTGTAGGAC CACTATGAGA CCTCAGTCCT TCTATGATGG AAGTCATTCT TGTGCCAGAG GAGTGTGCCA TATTCCAATG 1401

1451 GCTGAGCCGT TTTGCCCCAA AACGAGAGAG GTGTGTAGTC TTTCTGGAAG 1501 GTGTACCAGA ATAAATCATG TGGGCTTGGG GTGGCATCTG GCATTTGGTT 1551 AATTGGCAGA CGGAGTGGCC CCATACCCTC ACTCAAGTTT GCTTTGTATT 1601 ATGCAAGTTT ATGGAGAGTT ATTTCCTGTT GCTAATAATT TNNNNNNNN 1701 AAGTGCAGCC TTAAGTTGTG CATGTGCTAG TATGTTTTGA AGTTTCTGGT ·1751 TTTTCTTTC TAGGTTCTTA TAGAGACTGC TAAGAAGCTA GGACTCCGGT 1901 GCCACTCANA GGGGACAATG GTCACAATCG AGGGACCTCG TTTTAGCTCC 1851 CGGCAGAAA GCTTCATGTT CCGCACCTGG GGGCCGGATG TTATCAACAT 1901 GACCACAGTT CCAGAGGTGG TTCTTGCTAA GGAGGCTGGA ATTTGTTACG 1951 CAAGTATCGC CATGGGCACA GATTATGACT GCTGGAAGGA GCACGAGGAA 2001 GCAGTAGGTG GAATTCTTTT CTAAGCACAT ATAGCATGGG TTTCTGGGTG 2051 CCAATAGGGT GTCTTAACTG TTTGTTTCTA TTACGTTAGT TTCAGAAAGT 2101 GCCTTTCTAC AAGGTTTTGA AGTTGTTAAT ATTTTCTGTA GTTCCATTGG 2151 AAGGTAAGAA CAAAGATCAA AAGAAAGAAA GAGACACTTT TACCCAAGGA 2201 TCAGTAGTGA AAATAGTACA TTGTAGGCAT GTAGATGTGT TGAGAATCAT 2251 ACTAAGACTT GGGCCTTNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN 2351 GAGCTCCGAA AAATGTTTTA TGACTAGCAG TGGAATTTTA AGTTCTAGTA 2401 ACCTCCAGTG CTATTGTTTC TCTAGGTTTC GGTGGACCGG GTCTTAAAGA 2451 CCCTGAAAGA AAACGCTAAT AAAGCCAAAA GCTTACTGCT CACTACCATA 2501 CCTCAGATAG GGTCCACAGA ATGGTCAGAA ACCCTCCATA ACCTGAAGGT 2551 AAGTGTCAGC CATGGACAAC CAGGCATGTC TGGAGACTCT CTATTGTCTT 2601 CTCCTCTCAC TAGCATCACA CCCGGGGGTC CTCATGTATT TTATGCCAGC 2701 CTGTAGAATT TATTTAAAGT GTATGTTTCC TGCGTCCTCA CTTTGATCTA 2751 GAAAATCAAA ATCTGGTTTT TTTTTTAACA AACATCTCAG TAATTACGCC 2801 AACATGTGAA TITCACTGCC TCCTTTCTTC CTTTCAGAAT ATGGCCCAGT

2851	TTTCTGTTTT	ATTACCAAGA	<u>CATTAA</u> AGTA	GCATGGCTGC	CCAGGAGAAA
2901	AGAAGACATT	CTAATTCCAG	TCATTTGGGA	ATTCCTGCTT	AACTTGAAAA
2951	AAATATGGGA	AAGACATGCA	GCTTTCATGC	CCTTGCCTAT	CAAAGAGTAT
3001	GTTGTAAGAA	AGACAAGACA	TTTGTGTGTA	TTAGAGACTC	CTGAATGATT
3051	TAGACAACTT	CAAAATACAG	AAGAAAAGCA	222	

Figure. The genomic sequence of MTAP gene. Exons 1-8 are underlined.